UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,016	02/01/2000	Mrudula Kanuri	95-308	5591

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EXAMINER
HA, YVONNE QUY M

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *14 November 2003*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-11* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-11* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1.   Claims 1-11 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-4, 7-9, and 11 are rejected under 35 U.S.C 103(a) as being unpatentable over

Viswanadham et al. (Pub No. US 2001/0043614) in view of Bare (US 6,580,715).

Referring to Claims 1 and 9, Viswanadham discloses a system configuration with a

plurality of ports that couples to LAN hubs and router (Fig. 1), and various switches (Fig 2B).

The system may comprise of switching module (i.e. RISC processor and software) (Paragraph

0023, pg. 1) configured for learning network addresses (Paragraph 0027, pg. 2; Paragraph 0038,

pg 3). Viswanadham further discloses the enable/disable Layer 2 or Layer 3 support on per-port

basis (Paragraph 027, pg. 2) but failed to disclose disabled for an identified network switch port.

However, Bare discloses the system is can also have the learning disabled for an identified

network switch port where the switch will remove the port from the broadcast mask where it

currently forwarding broadcast packets on that port (col. 51, lines 17-42). At the time of the

invention, it would have been obvious to a person of ordinary skill in the art to combine the

teaching of Viswanadham multiplayer switching with Bare load balancing protocols. A computer

network communication link has a maximum data transfer bandwidth parameter defining the

maximum rate of information exchange over that network. The maximum bandwidth of the

computer network may be rapidly reached. The overall performance of the networked

computing environment may be reduced because information exchange requests may have to

wait completion of earlier information exchange requests utilizing the communication link. It is

desirable to segregate such subsets of devices from another to reduce the volume of information

exchange applied to various segments of the computer network. Having the capability of

enabling/disabling an identified port would help managing the routing more efficiently.

Referring to Claim 2, Viswanadham discloses all aspects of the claimed invention and

further teaches the learning of L2 and L3 address information by network switch ports and

connected subnetworks (Paragraph 0025, pg. 1; Paragraph 0026, pg. 2; Paragraph 0027, pg. 2).

Referring to Claim 3, Viswanadham discloses all aspects of the claimed invention and

further teaches the storage of table entry in an address table which includes source MAC and IP

addresses from the first data packet and an identifier of the second network switch port

(Paragraph 0105, pg. 8).

Referring to Claims 4 and 11, Viswanadham discloses all aspects of the claimed

invention and further teaches the use of a disable flag that when set for a port, it inhibits the

learning on that port (Paragraph 0105, pg. 8; Paragraph 0106, pg. 8).

Referring to Claims 7 and 8, Viswanadham discloses all aspects of the claimed invention

and further teaches the disabling process where a system configured with a plurality of ports that

couples to LAN hubs and router (Fig. 1), and various switches (Fig 2B) receiving a data packet

with source and destination addresses are learned if learning bit is not disabled or are not learned

if the learning bit is disabled (Paragraph 0105, pg. 8; Paragraph 0106, pg. 8; Paragraph 0107, pg. 8; Paragraph 0108, pg. 8).

3.   Claims 5, 6 and 10 are rejected under 35 U.S.C 103(a) as being unpatentable over Viswanadham et al. (Pub No. US 2001/0043614) in view of Kadambi (US 6,430,188).

    Referring to Claims 5 and 10, Viswanadham discloses the storage of table entry of a group of addresses (i.e. vector of ports) in an lookup address table as part of the learning process but failed to disclose the inclusion of virtual local area network (VLAN) identifier. Kadambi discloses the inclusion of the VLAN identifier in a table as part of the learning process (Col. 35, lines 63-66; Fig. 22; Fig. 23). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Viswanadham switching system with learning processes with the teaching of Kadambi inclusion of VLAN identifier in a table for lookup. One of ordinary skill in the art would have been motivated to combine the teaching of Viswanadham switching system with learning processes with the teachings of Kadambi inclusion of VLAN identifier in a table for lookup because the VLAN identifier can be used to enhance the functionality to handle an L2 request when combined with MAC address.

    Referring to Claim 6, Viswanadham discloses the switch system that learns L2 and L3 for switching but failed to disclose that a data packet with an L3 address that is not stored in the lookup table storage is forwarded to the network switch port for transfer to the router. Kadambi discloses the process of forwarding data packet with an L3 address in the absence of entry in lookup table (Fig. 26 and Fig. 27, Col. 37, lines 42-67; Col. 38, lines 1-15). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Viswanadham switch system that learns L2 and L3 for switching with the teachings

of Kadambi process of forwarding data packet with an L3 address in the absence of entry in

lookup table. One of ordinary skill in the art would have been motivated to combine the teaching

of Viswanadham switch system that learns L2 and L3 for switching with the teachings of

Kadambi process of forwarding data packet with an L3 address in the absence of entry in lookup

table because the system learning configuration can be enhanced with filtering capability at a per

port basis. Any port not identified for filtering will be routed normally.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-11 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner

can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ajit Patel can be reached on 703-308-5347. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

YQH   Ajit Patel
                                                                                 Primary Examiner